

Claims

- [c1] An anchor device for coupling an external device to a surface of a deck, said anchor device being received within an opening of the surface, said opening having an edge of the surface therein, said anchor device comprising:
- an anchor body positioned at least partially within said opening so that a notch receives the edge of the surface, said anchor body comprising a coupler extending outward from the opening, said coupler coupling to the external device.
- [c2] An anchor device as recited in claim 1 wherein the notch comprises a generally U-shape notch.
- [c3] An anchor device as recited in claim 1 wherein the anchor has a longitudinal side and a lateral side, said notch formed in the lateral side.
- [c4] An anchor device as recited in claim 1 wherein the coupler comprises a first coupler and a second coupler.
- [c5] An anchor device as recited in claim 4 wherein said first coupler and said second coupler having a respective first coupling hole and a second coupling hole therethrough.

- [c6] An anchor device as recited in claim 5 wherein said first coupling hole and said second coupling hole are coaxial.
- [c7] An anchor device as recited in claim 1 wherein the anchor body comprises a first body portion and a second body portion, said first body portion having the coupler and said second body portion comprising said notch.
- [c8] An anchor device as recited in claim 7 wherein the second body portion is rotatably coupled to the first body portion.
- [c9] An anchor device as recited in claim 7 wherein the second body portion is fixedly coupled to the first body portion.
- [c10] An anchor device as recited in claim 7 wherein the second body portion and the first body portion form a unitary structure.
- [c11] An anchor device as recited in claim 7 wherein the first body portion has a first planar member extending parallel to said surface, said coupler extending in a direction perpendicular to said first planar member.
- [c12] An anchor device as recited in claim 11 further comprising a flange coupled to said first planar member and said coupler.

- [c13] An anchor device as recited in claim 7 wherein said first body portion further comprises an extension portion, said extension portion extending into said second body portion.
- [c14] An anchor device as recited in claim 13 wherein the extension portion has a circular shape.
- [c15] An anchor device as recited in claim 7 wherein said second body portion comprises a second planar member coupled to said first body portion.
- [c16] An anchor device as recited in claim 15 wherein said second planar member is sized greater than said opening.
- [c17] An anchor device as recited in claim 15 wherein the second planar member has a first width greater than an opening width.
- [c18] An anchor device as recited in claim 15 wherein the second planar member has a first length greater than an opening length.
- [c19] An anchor device as recited in claim 15 wherein the second planar member has a first length greater than an opening length and a first width greater than an opening width.

- [c20] An anchor device as recited in claim 15 wherein the second planar member is parallel to the surface.
- [c21] An anchor device as recited in claim 7 wherein the second body portion comprises a channel therethrough for receiving a fastener, said fastener coupling said first body portion and said second body portion.
- [c22] An anchor device as recited in claim 7 further comprising a fastener plate coupled to the second body portion.
- [c23] An anchor device as recited in claim 1 wherein said coupler is trapezoidally-shaped.
- [c24] An anchor device for coupling an external device to a surface of a deck, said anchor device being received within an opening of the surface, said opening having an edge of the surface therein, said anchor device comprising:
a first body portion positioned at least partially within said opening so that a notch receives the edge of the surface and partially positioned on said surface over said opening and a first member is positioned over the opening to engage a top surface of the deck; and
a second body portion having a coupler extending outward from the first body portion, said coupler coupling to the external device.

- [c25] An anchor device as recited in claim 24 wherein the notch comprises a generally U-shape notch.
- [c26] An anchor device as recited in claim 24 wherein the anchor has a longitudinal side and a lateral side, said notch formed in the lateral side.
- [c27] An anchor device as recited in claim 26 wherein the second body portion is rotatably coupled to the first body portion.
- [c28] An anchor device as recited in claim 26 wherein the second body portion is fixedly coupled to the first body portion.
- [c29] An anchor device as recited in claim 26 wherein the second body portion and the first body portion form a unitary structure.
- [c30] An anchor device as recited in claim 29 further comprising a flange coupled to said first planar member and said coupler.
- [c31] An anchor device as recited in claim 26 wherein said first body portion further comprises an extension portion, said extension portion extending into said second body portion.

- [c32] An anchor device as recited in claim 31 wherein the extension portion has a circular shape.
- [c33] An anchor device as recited in claim 26 wherein said second body portion comprises a second planar member coupled to said first body portion.
- [c34] An anchor device as recited in claim 33 wherein said second planar member is sized greater than said opening.
- [c35] An anchor device as recited in claim 26 wherein the second body portion comprises a channel therethrough for receiving a fastener, said fastener coupling said first body portion and said second body portion.
- [c36] A system for straightening a frame of an automotive vehicle comprising:
a frame rack having a deck with an opening therethrough, said deck comprising a first surface and a second surface;
a hydraulic ram;
said anchor device being received at least partially within an opening of the surface and partially over said opening, said opening having an edge of the first surface therein, said anchor device comprising,
a first body portion positioned at least partially within

said opening so that a notch receives the edge of the surface and a first member is positioned over the opening to engage a top surface of the deck; and a second body portion having a coupler extending outward from first body portion, said coupler coupling to the hydraulic ram.

[c37] A system as recited in claim 36 wherein the notch comprises a generally U-shape notch.

[c38] A system as recited in recited in claim 36 wherein the anchor has a longitudinal side and a lateral side, said notch formed in the lateral side.

[c39] A system as recited in claim 38 wherein the second body portion is rotatably coupled to the first body portion.

[c40] A system as recited in claim 38 wherein the second body portion is fixedly coupled to the first body portion.

[c41] A system as recited in claim 38 wherein the second body portion and the first body portion form a unitary structure.

[c42] A system as recited in claim 41 further comprising a flange coupled to said first planar member and said coupler.

[c43] A system as recited in claim 38 wherein said first body

portion further comprises an extension portion, said extension portion extending into said second body portion.

- [c44] A system as recited in claim 43 wherein the extension portion has a circular shape.
- [c45] A system as recited in claim 38 wherein said second body portion comprises a second planar member coupled to said first body portion.
- [c46] A system as recited in claim 45 wherein said second planar member is sized greater than said opening.
- [c47] A system as recited in claim 38 wherein the second body portion comprises a channel therethrough for receiving a fastener, said fastener coupling said first body portion and said second body portion.
- [c48] A method for operating frame rack comprising:
inserting a portion of a leverage anchor at least partially into an opening in a surface of a frame rack so that said leverage anchor is at least partially directly adjacent to the surface over the opening;
engaging the frame rack surface into a notch of the leverage anchor; and
coupling a hydraulic ram to the leverage anchor device.
- [c49] A method as recited in claim 48 further comprising a

fastener plate coupled to the leverage anchor.

[c50] A method as recited in claim 47 wherein coupling comprises coupling the hydraulic ram to a coupler of the anchor device.